

ABSTRACT

When drive control of a generator is performed, PWM control of a switching circuit comprising an FET and a diode connected to the opposite ends of a winding is performed. In the vicinity of a moment in time L_{max} where the winding has a maximum inductance L , an alternating mode for repeating a supply mode and a reflux mode alternately is performed through PWM control. After the alternating mode is performed, the reflux mode is performed temporarily in order to increase the quantity of current, and then a regenerative mode is performed. The regenerative mode is performed by increasing the current level as much as possible when the reflux mode is started while suppressing the brake force of the rotor in the alternating mode. From a position advancing in angle by a time T_{ah} from the moment in time L_{max} where the winding has a maximum inductance L , a first alternating mode C_1 for repeating the supply mode P and the reflux mode Q alternately is performed. After the first alternating mode C_1 is performed, a second alternating mode C_2 for repeating the reflux mode Q and the regenerative mode R alternately is performed.